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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,643	07/15/2003	Philippe Schottland	134400-1	8576
23413	7590	11/02/2004	EXAMINER	
CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			RONESI, VICKEY M	
			ART UNIT	PAPER NUMBER
			1714	
DATE MAILED: 11/02/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

S. E.

Office Action Summary	Application No.	Applicant(s)	
	10/619,643	SCHOTTLAND ET AL.	
	Examiner	Art Unit	
	Vickey Ronesi	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/24/03, 4/20/04, 8/19/04, 8/27/03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. 37 CFR 1.98(a)(2) requires a legible copy of each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed.

The provided non-patent literature document entitled "New Intermediates and dyestuff for synthetic Fibers, Part VI. 1-Aryl-aminoanthraquinones" is illegible and has therefore not been considered by the examiner and crossed off the corresponding information disclosure statement dated December 24, 2003.

A copy of the non-patent literature document entitled "Preparation of 4-phenylbenzophenone" was not provided and has therefore not been considered by the examiner and crossed off the corresponding information disclosure statement dated April 20, 2004.

It is noted that US application nos. 10/384,986 and 10/391,401 cited on information disclosure statement dated August 27, 2003 have since been published as US Pre-Grant Publications US 2003/0205323 A1 and US 2003/0198892, respectively, which have been cited by the examiner on form PTO-892.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
3. The abstract of the disclosure is objected to because Formula (VIII) is incorrect since it is apparent that the line indicating a bond between H and R was intended to be a bond between the adjacent N and R. Correction is required. See MPEP § 608.01(b).

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4. The disclosure is objected to because of the following informalities:

- Formula (XI) on page 2, Formula (XI) on page 3, and Formula (VIII) on page 14 are incorrect since it is apparent that the line indicating a bond between H and R was intended to be a bond between the adjacent N and R.

- For consistency, since the chemical formulas on pages 2, 3, and 14 are identical, the designations should be the same, i.e., as a suggestion, the formula designation, "Formula (XI)," on pages 2 and 3 should be rewritten as "Formula (VIII)" so as to be consistent with the formula designation on page 14, as well as the formula designations in the present claims and abstract.

- On page 26, both formulas are incorrect since it is apparent that the line indicating a bond between H and R₁ was intended to be a bond between the adjacent N and R₁.

Appropriate correction is required.

Claim Objections

5. Claims 1-4, 8-10, 12, 14-15, 17-19, 21, 24, 32, 33, and 37 are objected to because the chemical nomenclature of "1,8-anthraquinone derivative" as applied to Formula (VIII) is imprecise. A more suitable name for the chemical Formula (VIII) is "1,8-diaminoanthraquinone derivative." Appropriate correction is required.

In claim 15, it is noted that "1,8-dialkylamino anthraquinone" is being interpreted as 1,8-di(alkylamino) anthraquinone or 1,8-bis(alkylamino) anthraquinone for examination purposes as suggested by applicant's specification on Table 4 on page 26.

Claim 2 is objected to because the word "and" should be inserted before "a minimum extinction coefficient" on line 4 of the claim.

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Claims 1, 24, 32, and 37 are objected to because the line indicating a bond between H and R in Formula (VIII) is incorrect since it is apparent that a bond between the adjacent N and R was intended. Appropriate correction is required.

Claim 35 is objected to because on line 2 of the claim “and” should be replaced with “or.” As currently written, the conjunctive word “and” suggests all three methods yet in the preceding line the phrase “at least one of” is recited which necessitates the use of alternative language, “or.” Appropriate correction is required.

Claim Rejections - 35 USC § 102

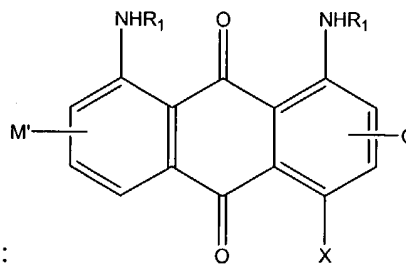
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-26, 28-30, and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Claussen et al (US 4,863,634).

Claussen et al discloses anthraquinone dyes used to dye plastics such as polycarbonate (others listed on col. 3, lines 41-44) in an amount ranging from 0.01 to about 30 wt %, preferably from about 0.1 to about 10 wt % (col. 3, lines 34-37), where the anthraquinone dye is represented



by Formula (IIb) on col. 2, lines 1-11 as follows:

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wherein R₁, M', Q, and X are representative of what is presently claimed in claims 1, 24, 32, and 37 (col. 1, line 18 to col. 2, line 19). Note that when R₁ is a cyclohexyl group and M', Q and X are hydrogen, the chemical formula arrived at is 1,8-bis(cyclohexylamino) anthraquinone.

Moreover, note that when R₁ is an alkyl group and M', Q, and X are hydrogen, the chemical formula arrived at is 1,8-bis(alkylamino) anthraquinone. It is the examiner's position that the generic chemical formula given in Claussen et al is sufficiently limited such that one of ordinary skill in the art is able to "at once envisage" the specific compound within the generic chemical formula (MPEP § 2131.02). Moreover, it is settled in case law that the compound is therefore anticipated. *In re Petering*, 301 F.2d 676, 133 USPQ 275 (CCPA 1962).

Although Claussen et al does not disclose the properties of the anthraquinone dye alone and the composition with the anthraquinone dye, it is the examiner's position that such properties are inherent since the dye and composition of Claussen et al meets the present compositional limitations and a material and its properties are inseparable.

In light of the above, it is clear that Claussen et al anticipates the presently cited claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 27 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Claussen et al (US 4,863,634) in view of US Adachi et al (5,747,632).

Claussen et al is silent with respect to the weight-average molecular weight of its polycarbonate resin.

Adachi et al teaches that low molecular weight polycarbonate has a relatively higher flowability in which both molding transcription and cycle times-shortening is suitable for the production of optical recording mediums (col. 2, lines 43-47). Adachi et al exemplifies polycarbonates with a range of viscosity average molecular weight of 13,000 to 20,000 (col. 12, lines 34-39).

Since Adachi et al teaches that relatively low molecular weight polycarbonate provides improved flowability properties especially for the production of optical recording mediums, it would have been obvious to one of ordinary skill in the art to utilize a polycarbonate with a weight average molecular of less than 20,000 in Claussen et al and thereby arrive at the presently cited claims.

8. Claims 32-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Claussen et al (US 4,863,634) in view of Genta (US 3,923,454, cited on IDS dated 12/24/2003).

Although Clausen et al discloses a plastic comprising a resin and the 1,8-diaminoanthraquinone dye as presently claimed, it is silent with respect to how such an article is made.

Genta discloses an anthraquinone dye that is used to color polymeric resins such as polycarbonate (col. 5, line 51 to col. 6, line 11) to form a rigid plastic substrate (i.e., an article) that is made by coloring the resin with the dye through pigmentation processes, i.e., the dye is

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mixed with the resin using sets of mixing rollers, mixing or milling apparatus (i.e., pelletized) and then shaped into the desired final form (col. 6, lines 12-32).

Given that Genta is within the same field of endeavor as Clausen et al and given that Genta discloses a method of forming an article, it would have been obvious to one of ordinary skill in the art to utilize Genta's method of making in Clausen et al and thereby arrive at the presently cited claims.


Correspondence

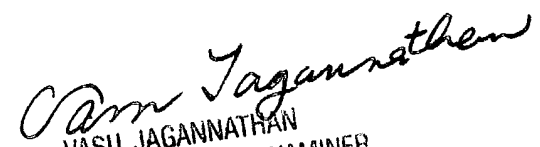
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

vr
October 25, 2004




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